

pretiosa, *P. rouasti*, *B. raiblensis*, *B. norvegica*, *M. saxicolella*, *B. alpherakii*, *P. nigrolucidella*, *P. staudingeri*, *P. millierei*, *P. flavescens*, *P. kuldschaensis*, *E. mentonella*, *E. alpina*, *E. hofmanni*, *E. flavociliella*, *S. helicinoides*, *A. calberlae*, *P. detrita*, *P. stigmatella*, *P. minutella*, *P. fulminella*, *H. wockii*, *O. resubiella*, *O. inquinata*, *O. staudingeri*, *A. maritimella*, *A. oberthueri*, *A. jordani*, *A. walensis*, *A. grummi*, *A. sera*, *Eumeta pungeleri*, *E. minuscula*, *E. pryeri*, *E. aurea*, and also additional specimens of the following species of which he has only one or two, generally imperfect examples: *P. dardoinella*, *S. nickerlii*, *B. vernilla*, *M. subflarella*, *Bijugis graeae*, *B. altaica*, *A. helicinella*, *A. bruandi*, *A. constancella*, *P. crassicornis*, *P. gondebantella*, *H. malvinella*, *H. lucasi*, *O. tabanivicinella*, *O. colossa*, *A. senex*, ? *A. tedaldii*, *A. quadrangularis*, *O. aschi*, *C. japonica*, *D. rayonoti*, *M. ciliaris*, *M. lugubris*, *S. clathrella*, *D. granigerella*, *B. comitella*, *P. nocturnella*, *A. praecelleus*, *A. viadrina*, *S. standfussi*, *L. schiffermilleri*, *O. silphella*, and any species at present unnamed.

Seven New Varieties of *Abraxas grossulariata*.

By Rev. G. H. RAYNOR, M.A.

The following very definite forms of this wonderful species seem to me worthy of varietal names, which I hereunder append to the technical descriptions of each distinct aberration.

GROSSULARIATA.

ab. *aberdoniensis*, mihi.—Forewings much clouded with black, but having constantly a large irregular oblong patch of white adjoining the black basal blotch on the inner margins of the forewings. The late Arthur Horne reared this freely at Aberdeen, and I have bred several from Yorkshire.

ab. *antemarginata*, mihi.—Forewings with a black band in the actual specimen I am describing 3mm. broad in its upper half, but only 2mm. broad in its lower half, extending from the apex to the tornus, of the forewings. This band replaces the usual black marginal spots. Reared by the Rev. C. R. N. Burrows from Mucking, Essex, in 1923.

ab. *postmarginata*, mihi.—The hindwings with a broad black band similar to the one I have just described as occurring on the forewings (in ab. *antemarginata*). A specimen appeared in the Sydney Webb sale a short time ago, but I have no note of its origin.

ab. *nigroapicata*, mihi.—At the apex of each forewing is a black blotch—5mm. long \times 3mm. broad in the specimen here described—extending from the apex to the black median band. It thus contrasts strongly with ab. *fulvopicata* in which the apical blotch is fulvous. A male bred from a wild York larva by myself in July, 1920.

ab. *nigrolineata*, mihi.—On the forewings is a broad horizontal black line, varying in width from 1 to 2 mm., uniting the disc to the basal blotch. Occurs in *grossulariata* and *varleyata*, but not so far in *lacticolor*.

LACTICOLOR.

ab. *subangulata*, mihi.—Beneath the disc of the forewing is a black angular (or elbowed) line varying in intensity, but very distinct. Although this peculiarity is not very rare in *lacticolor*, I have reared only one *grossulariata* possessing it.

VARLEYATA.

ab. *nigrocetacea*, mihi.—Very similar to ab. *exquisita*, but having the white areas larger and more transparent. On the hindwings the only black markings, besides the discs, are a faint black transverse band, so broad as to cover about a third of the wing, and a row of small black spots, sometimes forming a narrow band, round the edge of the outer margin. This very charming variety has been evolved from ab. *varleyata*, and possibly does not occur in a wild state. I have bred a few examples suffused with yellow—a very handsome insect. (Locality Yorkshire).

 CURRENT NOTES AND SHORT NOTICES.

Entomology is slowly becoming recognised in high places. We read with pleasure in the daily press that a Civil Pension has been granted to Miss Bacot, who was wholly dependent upon her brother the late A. Bacot, in recognition of his devotion to the scientific investigation of disease.

The *London Naturalist* for the year 1922 consists of about 40 pp. of matter other than entomological. A report of half a page of very short summaries of five field meetings represents, "almost exclusively," the work of the Entomological Section during the year. Ornithology and Archaeology seem the chief lines of study of the present members of the Society, which years ago made its name as the City of London Entomological Society, in the days of Clark, Bacot, Prout, etc. There are two plates of birds.

The *Vasculum*, a North Country Quarterly, was established nine years ago to deal with Science and Local History, more particularly of the six northern counties of England. Among the names of those responsible for its contents we note the Rev. J. E. Hull, M.A., editor, our colleague R. S. Bagnall, F.E.S., E. Ernest Green (President of the Entomological Society), J. W. H. Harrison, D.Sc., etc., and F. C. Garrett, D.Sc. (Business Editor). In a circular sent to us we read that in spite of "a great increase in the circulation we have not yet become self-supporting," and the editors appeal for further subscribers of 5s. per ann. Those numbers of the magazine which we have perused were most interesting, and appeal strongly to all field workers.

The final part of the *Annales de la Société entomologique de France* for 1922 contains, I., J. A. Lestage, Catalogue des Ephémères de France; II., E. Rabaud, sur la Nidification de *Ceratina callosa* (Hym); III., L. Sheljuzko, Lépidoptères nouveaux ou peu connus de la Sibérie (plt.); IV., E. Fleutiaux, Les *Melasidae* du Japon (plt.);